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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/560,609

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Denis Eugene

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SHOEMAKER AND MATTARE, LTD
10 POST OFFICE ROAD - SUITE 110
SILVER SPRING, MD 20910

EXAMINER

GILLESPIE, BENJAMIN

ART UNIT

PAPER NUMBER

1796

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/560,609	EUGENE ET AL.	
	Examiner	Art Unit	
	Benjamin J. Gillespie	1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/13/2005</u> | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

1. Claims 14-20, 22-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Firstly, the language “obtainable by” renders the claims indefinite because it fails to particularly point out and distinctly claim the invention since one cannot determine from the phrase just which compositions are “obtainable by” applicants process and which are not. Secondly, the term “use” renders claim 23 indefinite, because an invention cannot be claimed in terms of “use” but must be claimed using method claims instead. *In re Fong* 129 USPQ 264.
2. Finally, “poly-THF2000” renders claim 16 indefinite because the claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. In fact the value of a trademark would be lost to the extent that it became descriptive of a product, rather than used as an identification of a source or origin of a product. Thus, the use of a trademark or trade name in a claim to identify or describe a material or product would not only render a claim indefinite, but would also constitute an improper use of the trademark or trade name.
3. Claim 23 provides for the use of a polyurethane resin, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

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4. Claim 23 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Double Patenting

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

6. A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned

with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

7. Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. Claims 14-15, 19-25 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 25, 28, 33, 34, 38-39, and 44 of copending Application No. 10/560,607. Although the conflicting claims are not identical, they are not patentably distinct from each other because both are drawn to polyurethanes, which are useful in laminates, and comprise the reaction product of high molecular weight polyol, low molecular weight diol and diamine, diisocyanate, and optionally a chain terminating agent, wherein the resulting polyurethane has a weight average molecular weight between 20,000 and 80,000 g/mol.

9. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 14-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Blum et al ('988). Blum et al teach a coating composition containing a polyurethane resin and a method for

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its production comprising the reaction product of a) polyether polyol, b) low molecular weight diol, c) low molecular weight diamine, and optionally d) chain terminating agent, wherein the ratio of isocyanate to isocyanate-reactive groups is approximately 1:1, and the resulting polyurethane resin has a weight average molecular weight that overlaps applicants' claimed range, and may be in the presence of solvent (Abstract; col 1 lines 17-23; col 6 lines 61-65; claim 14).

11. In particular, patentees teach that the a) polyether polyol is based on polytetrahydrofuran, is present relative to the diisocyanate in an amount that corresponds to applicants' claimed range, and preferably has a molecular weight between 900 and 2,500 g/mol. Components b) and c) consists of butanediol and isophorone diamine, respectively (Col 4 lines 1-4; col 5 lines 33-40; Example 1). Finally, patentees explain that the polyurethane can be applied to plastic substrates and are useful in ink printing laminates (Col 7 lines 7-9, 21-32).

12. Claims 14-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Eisele et al (EP 1 229 090). Eisele et al teach a coating composition, useful in ink printing laminates, that contains a polyurethane resin and a method for its production comprising the reaction product of a) polyether polyol, b) low molecular weight diol, c) low molecular weight diamine, and optionally d) chain terminating agent, wherein the ratio of isocyanate to isocyanate-reactive groups is at least 1:1, and the resulting polyurethane resin has a weight average molecular weight that overlaps applicants' claimed range, and may be in the presence of solvent (Abstract; paragraphs 1, 11, 15, 18, and 37).

13. In particular, patentees teach that the a) polyether polyol is present relative to the diisocyanate in a NCO:OH ratio ranging from 2.3:1 to 1:1, and has a molecular weight as low as

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1,500 g/mol (Paragraphs 12 and 14). Components b) and c) consists of butanediol and isophorone diamine, respectively (Paragraphs 29 and 33). Finally, patentees explain that the polyurethane can be applied to plastic substrates by flexography, then laminated with an adhesive, and finally covered with a top layer forming a laminate (Paragraphs 1 and 48).

14. Claims 14-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Arcurio et al (WO 02/38643). Arcurio et al teach a coating composition containing a polyurethane resin and a method for its production comprising the reaction product of a) polyether polyol, b) low molecular weight diol, c) low molecular weight diamine, and optionally d) chain terminating agent, wherein the ratio of isocyanate to isocyanate-reactive groups is at least 1:1, and the resulting polyurethane resin has a weight average molecular weight that overlaps applicants' claimed range, and may be in the presence of solvent (Abstract; page 3 lines 24-32; page 9 lines 31-33).

15. In particular, patentees teach that the a) polyether polyol is based on polytetrahydrofuran, is present relative to the diisocyanate in an amount that corresponds to applicants' claimed range, and preferably has a molecular weight between 425 and 3,000 g/mol (Page 6 lines 16-18; page 7 lines 32-35). Components b) and c) consists of butanediol and isophorone diamine, respectively (Page 7 lines 29; page 8 lines 28-29). Finally, patentees explain that the polyurethane can be applied to plastic substrates by flexography, then laminated with adhesive and finally covered with a top layer forming a laminate (Page 1 lines 24-31).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

17. Claims 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blum et al ('988) in view of Arcurio et al (WO 02/38643). Aforementioned, Blum et al teach a polyurethane coating composition and a method for its production comprising the reaction product of polyether polyol, butanediol, isophorone diamine, and optionally mono-functional chain stopper. In particular, Blum et al disclose that the polyurethane is applied to plastic substrates by flexography, followed by drying said urethane thereby removing the solvent, wherein the polyurethane is useful in printing ink laminates, however patentees fail in teaching method steps that correspond to claim 24.

18. Aforementioned, Arcurio et al also teach a polyurethane coating composition based on the reaction product of polyether polyol, butanediol, isophorone diamine, and optionally chain terminating compounds, wherein the isocyanate and isocyanate-reactive species are present in amounts that result in at least a 1:1 equivalent ratio and a polyurethane molecular weight between 20,000 and 80,000. Arcurio et al go on to teach a useful method of creating a laminate

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by applying the polyurethane ink composition to a plastic substrate, followed by application of an adhesive on the dried polyurethane layer, and finally top the adhesive with a covering layer.

19. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the same method steps of Arcurio et al in Blum et al in order to create a printed ink laminate based on the fact that both Arcurio et al and Blum et al have analogous compositions, are drawn to similar applications, and one would reasonably expect to utilize the method of Arcurio et al for the compositions of Blum et al.

20. Claims 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blum et al ('988) in view of Eisele et al (EP 1 229 090). Aforementioned, Blum et al teach a polyurethane coating composition and a method for its production comprising the reaction product of polyether polyol, butanediol, isophorone diamine, and optionally mono-functional chain stopper. In particular, Blum et al disclose that the polyurethane is applied to plastic substrates by flexography, followed by drying said urethane thereby removing the solvent, wherein the polyurethane is useful in printing ink laminates, however patentees fail in teaching method steps that correspond to claim 24.

21. As previously discussed, Eisele et al also teach a polyurethane coating composition based on the reaction product of polyether polyol, butanediol, isophorone diamine, and optionally chain terminating compounds, wherein the isocyanate and isocyanate-reactive species are present in amounts that result in at least a 1:1 equivalent ratio and a polyurethane molecular weight between 20,000 and 80,000. Eisele et al go on to teach a useful method of creating a laminate by applying the polyurethane ink composition to a plastic substrate, followed by application of an adhesive on the dried polyurethane layer, and finally top the adhesive with a covering layer.

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22. Based on the disclosure of Eisele et al, it would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the claimed method steps in Blum et al in order to create a printed ink laminate based on the fact that both Eisele et al and Blum et al have analogous compositions, are drawn to similar applications, and one would reasonably expect to utilize the method of Eisele et al for the compositions of Blum et al.

Note

23. The references that have been lined through on the information disclosure statement filed 12/13/2005 have not been considered because no English translation has been provided.

Conclusion

24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin J. Gillespie whose telephone number is 571-272-2472. The examiner can normally be reached on 8am-5:30pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

25. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

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like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

B. Gillespie


RABON SERGENT
PRIMARY EXAMINER